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COMMISSIONER OF PATENTS & TRADEMARKS WASHINGTON, D.C. 20231

Dear Sir:

Transmitted herewith for filing is the patent application of:

INVENTOR: DANIEL FANEUF

COMBINATION ROPE AND CLIP FOR CULLING FISH FOR:

Enclosed are the following:

Specification: 7 pages; Claims: 3 pages; Abstract: 1 page

Declaration and Power of Attorney Sheet(s) of drawings 5 pages

An assignment of the invention to: PLASTI-CLIP CORPORATION

The filing fee has been calculated as shown below:

		SMALL ENTITY	LARGE ENTITY
BASIC FEE:		\$355.00	\$710.00
TOTAL CLAIMS:	20 - 20 =	x 9 = \$	x 18 = \$
INDEPENDENT CLAIMS:	2 - 3 =	x 40 = \$	x 80 = \$
MULT. DEPEND. CLAIMS:		+ 135 = \$	+ 270 = \$
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> Norman P. Soloway Attorney for Applicant Reg. No. 24,315

CERTIFICATE OF EXPRESS MAILING

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1	COMBINATION ROPE AND CLIP FOR CULLING FISH
2	
3	FIELD OF THE INVENTION
4	This invention relates to an apparatus for use in the sport of fishing.
5	
6	BACKGROUND OF THE INVENTION
7	In a bass fishing tournament, the limit of a single fisherman is often five fish, the
8	limit for a team is often seven fish, and salt-water limits can be ten fish. It is important
9	for a fisherman, when fishing in a tournament, to have a quick and easy way to cull fish.
10	When the maximum number of fish is caught and put in the live well, and the fisherman
11	has caught another fish, it is time to start culling. Culling is an ongoing process of
12	releasing the smallest fish and replacing it with a larger fish. Many different methods
13	have been developed over the years for identifying which fish is the smallest. Often a
14	hook or a clip with some type marker is attached to the fish. The hook or clip can be
15	attached to the fish through the fish's mouth or to one of the fish's fins. Some of these
16	hooks or clips can injure the fish by puncturing holes in fish. Some of these hooks and
17	lips have a length of cord attached that can become entangled with other hooks, clips or
18	cords. These cords often sink to the bottom of the live well unless tied to the wall of the
19	live well.
20	

21 BRIEF SUMMARY OF THE INVENTION

The present invention is intended to overcome these disadvantages. Accordingly,

1	it is an object of the present invention to provide a fish friendly clip for holding a fish
2	without puncturing the fish.
3	It is a further object of the present invention to provide a clip coupled to a length
4	of floating rope to allow the user to easily retrieve a fish from a live well without having
5	to reach below the surface of the water.
6	It is a further object of the present invention to provide a clip coupled to a length
7	of rope such that the force exerted by the rope on the clip tends to increase the gripping
8	force of the clip.
9	The above and other objects, feature, and advantages of the present invention wil
10	be apparent in the following detailed description thereof when read in conjunction with
11	the appended drawings wherein the same reference numerals denote the same or similar
12	parts throughout the several views.
13	
14	BRIEF DESCRIPTION OF THE DRAWINGS
15	Figure 1 is a front view of a prior art molded clip;
16	Figure 2 is an isometric view of the plastic clip of Figure 1 secured to a plastic
17	garment hanger;
18	Figure 3 is an isometric view of a combination clip and rope consistent with the
19	present invention;
20	Figure 4 is a front view of the combination clip and rope of Figure 3 used by a
21	fisherman to hold a fish; and
22	Figure 5 is a second embodiment clip consistent with the present invention.

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DETAILED DESRIPTION OF THE DRAWINGS

Figure 1 shows a one piece molded clip 100 according to the prior art. The clip is molded of an acetal resin, preferably DuPont DELRIN. The clip has a first rigid member 102 spaced from a second rigid member 104. A spacer 114 joins the rigid members. Member 102 has an upper portion 106 that extends upward from the spacer 114 and a lower portion 110 that extends downward from the spacer 114. Likewise, member 104 has an upper portion 108 that extends upward from the spacer 114 and a lower portion 112 that extends downward from the spacer 114. The upper portions 106 and 108 are shown having a plurality of grooves to assist in gripping the clip. At the distal end of each of the lower portions 110 and 112 furthest from the spacer 114 is a protrusion 136 and 138. The protrusions 136 and 138 extend towards each other and are angled upward towards the spacer 114. At the end of the protrusions 136 and 138 are gripping portions 126 and 128 respectively. The gripping portions 126 and 128 are shown having a plurality of grooves to assist in the gripping of items. The spacer 114 joins the rigid member 102 and 104, spaces them, and operates as a fulcrum. The clip is designed such that in the absence of any forces applied to the upper portions 106 and 108, the gripping portions 126 and 128 are in close proximity. A force F applied to the upper portions 106 and 108 of rigid members 102 and 104 urges the griping portions 126 and 128 to separate. A biasing member 116 opposes the force F. An item 134 inserted between the gripping portions 126 and 128 when they are spaced will be secured when the force is removed. The biasing member 116 extending from the upper portion 108 of rigid

member 104 increases the amount of force available at the gripping portions 126 and 1 128. An end 118 of the biasing member 116 travels against the inside wall of upper 2 portion 106. The end 118 is capable of travel between a ledge 120 and spacer 114. A 3 first opening 122 is formed by the biasing member 116, upper portions 106 and 108, and 4 5 the spacer 114. The lower portions 110 and 112, the protrusions 126 and 128 and the 6 spacer 114 form a second opening 124. Extending from the spacer 114 into the second 7 opening 124 is a pair of protrusions 130A and 130B. The protrusions 130A and 130B 8 form a flexible opening 132. 9 As shown in Figure 2, the clip 100 can be secured to a garment hanger 150. A 10 pair of clips can be used to secure a variety of items, such as a pair of pants, to the hanger 150. The flexible opening 132 is used to connect the clip 100 to the hanger 150. The 11 flexible opening 132 is sized to fit hangers with a diameter between 1/4" and 3/32". The 12 13 one-piece molded design of the clip has no metal parts to rust or stain secured items. Figure 3 shows an assembly 200 comprised of a clip 100' and a length of rope 14 204. The clip 100' may be the same as clip 100 shown in Figure 1 but does not have to 15 16 be identical. The rope 204 is preferably a 10" to 24" length of braided hollow 17 polypropylene rope. Braided hollow polypropylene is preferred because it has a positive buoyancy, i.e. floats in water. Ropes of other material can alternatively be used. The 18 rope 204 has a first end 206 and a second end 208. The first end 206 is preferably melted 19 20 to prevent fraying. The second end 208 is preferably threaded through an opening 122' in the clip 100' and then turned in and threaded back inside the rope 204. Alternatively, 21 the first end 206 can be formed into a loop large enough to fit over a fisherman's hand by

- threading the end 206 back in side the rope 204. This threading can be done with the
- 2 help of a fid, not shown. U.S. Patent 6,044,582 discloses a method for forming a loop in
- a length of braided rope. The '582 patent is herein incorporated by reference in its
- 4 entirety.
- Figure 4 shows a fish 300 secured to the assembly 200. A fisherman securely
- 6 holding the rope 204 in his hand 304 holds the assembly 200 vertically. A pair of
- 7 upwardly extending protrusions 136' and 138' of the clip 100' securely holds the fish 300
- 8 by gripping the fish's lip or jaw 302. The weight of the fish 300 is resisted by the
- 9 fisherman exerting an equal and opposite force on the rope 204. The force caused by the
- fisherman pulling on the rope 204 urges a biasing member 116' upward. The upward
- movement of the biasing member 116' urges the upper portions 106' and 108' to move
- away from each other which causes the protrusions 136' and 138" to move towards each
- other. The rigid members 102' and 104' are capable of rotating about the spacer 114'.
- 14 Thus, the heavier the fish, the greater the gripping force applied to the fish lip or jaw by
- the protrusions 136' and 138'. The upward angled protrusions 136' and 138' form a
- 16 reverse taper that can positively clamp the fish's lip. The fish can be positioned relative
- to the clip 100' such that the gripping portions 126' and 128' grab the fish just below the
- fat portion of the fish's lip. The ledge 120 prevents the biasing member 116' from
- coming loose when an upward force is applied to the rope 204. A protrusion 130' can be
- used as a lip stop to prevent the fish from being inserted too far into the clip 100'.
- After a fisherman catches a fish he wants to keep, he simply squeezes the upper
- portions 106' and 108' of the clip 100' with his fingers, inserts the fish's mouth in the

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- 1 opening 124', and then releases the upper portions 106' and 108'. The fisherman can 2 then put the fish 300 and the assembly 200 into the live well. The fish is free to swim 3 around the live well. The end 206 of the rope 204 floats on the top of the water. When
- 4 the fisherman wants to remove a fish from the live well, all he has to do is grab the end of
- 5 the rope floating on top of the water in the live well.
- 6 The combination clip and rope can be sold in kits of five or more. Preferably, 7 each of the ropes is a different color. The different colors allow the fisherman to quickly 8 and easily find the smallest fish by grabbing the appropriate colored rope. The fisherman 9 may use a list to keep track of the weight and the corresponding color of rope.
- 10 Alternatively, the first end 204 can include an indicator upon which the fish weight can be written. 11
- 12 Figure 5 shows a second embodiment of a clip 100". The clip 100" shows an alternative biasing member 116" and lip stop 130". The biasing member 116" is coupled to the ends of upper portions 106" and 108". Coupled to the biasing member 116" is a pair of protrusions 150A" and 150B". The protrusions 150A" and 150B" form an 16 opening 150". The opening 150" provides a convenient coupling location for a rope. 17 When a force is exerted upward on the coupled rope, the force urges the upper portion 106" and 108" away from each other which urges protrusions 136" and 138" closer together. This increases the gripping force of the protrusion 136" and 138". The alternative lip stop 130" is shown as a "T".
 - It should be understood that, while the present invention has been described in detail herein, the invention can be embodied otherwise without departing from the

- 1 principles thereof, and such other embodiments are meant to come within the scope of
- 2 the present invention as defined in the following claim(s)

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1		<u>CLAIMS</u>
2	1.	An apparatus for holding a fish, comprising:
3		a clip having two or more opposing protrusions moveable between a first position
4	and a s	second position, the protrusions urged towards one another by a biasing member to
5	create	a gripping force between the protrusions, in the first position, the gripping force
6	capabl	e of holding a fish, and
7		a length of rope having a loop formed at a first end, the loop securing the rope to
8	the cli	p, the loop capable of exerting a force on the biasing member thereby increasing
9	the gri	pping force.
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11	2.	The apparatus of claim 1, wherein the protrusions and the biasing member are
12	molde	d as one piece.
13	3.	The apparatus of claim 2, wherein the clip is molded from an acetal resin.
14	4.	The apparatus of claim 1, wherein the rope is a braided hollow polypropylene.
15	5.	The apparatus of claim 4, wherein the loop is formed by inserting the first end of
16	the rop	be inside the hollow rope a spaced distance from the first end.
17	6.	The apparatus of claim 1, wherein the rope has a positive buoyancy in water.
18	7.	The apparatus of claim 1, wherein the rope comprises a second end, the second
19	end fo	rming a loop to assist in holding the rope
20	8.	The apparatus of claim 1, wherein the rope comprises a second end, the second

The apparatus of claim 1, wherein the rope is adapted to float on the surface of

end comprising a marker for indicating the weight of an attached fish.

water

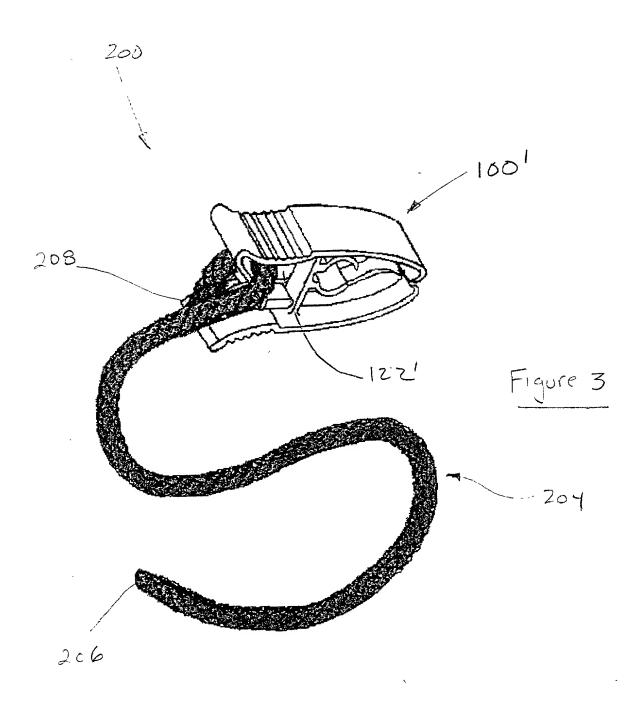
- 2 10. The apparatus of claim 1, wherein the protrusions are angled towards the biasing
- 3 member.
- 4 11. The apparatus of claim 1, wherein the protrusions further comprise a plurality of
- 5 grooves to assist in the holding of the fish.

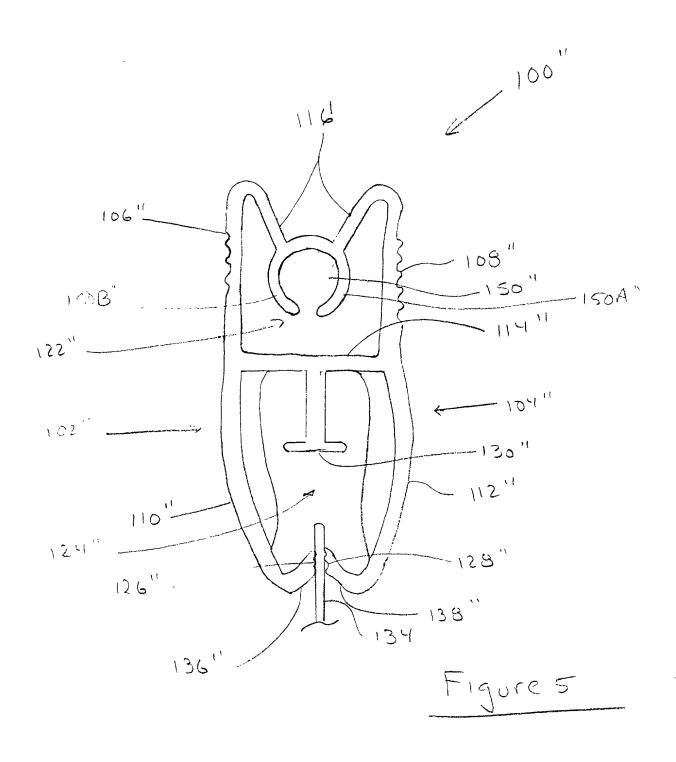
- 7 12. An apparatus for holding a fish, comprising:
- 8 a clip formed of two or more elongated rigid members, the rigid members having
- 9 a first end and a second end, the rigid members each having a gripping portion at the first
- end for holding a fish, the rigid members rotatable about a spacer located between the
- first end and the second end, a biasing member coupled to the rigid members urging the
- second ends to move away from one another and the first ends to move towards one
- 13 another, and
- a length of rope coupled to the biasing member, the rope capable of exerting a
- 15 force on the biasing member further urging the second ends of the rigid members to
- 16 move away from one another.
- 17 13 The apparatus of claim 12, wherein the rigid members, the spacer, and the biasing
- 18 member are molded as one piece.
- 19 14. The apparatus of claim 13, wherein the clip is molded from an acetal resin.
- 20 15. The apparatus of claim 12, wherein the rope is a braided hollow polypropylene.
- 21 16. The apparatus of claim 15, wherein the rope has a loop formed at a first end of the
- 22 rope, the loop coupling the rope to the clip.

- 1 17. The apparatus of claim 16, wherein the loop is formed by inserting the first end of
- 2 the rope inside the hollow rope a spaced distance from the first end.
- 3 18. The apparatus of claim 12, wherein the rope has a positive buoyancy in water.
- 4 19. The apparatus of claim 12, wherein the rope comprises a second end, the second
- 5 end forming a loop to assist in holding the rope.
- 6 20. The apparatus of claim 12, wherein the rope is adapted to float on the surface of
- 7 water.

l	ABSTRACT
2	A clip and rope combination is disclosed for holding a fish. The clip is shaped to
3	securely hold the fish by gripping the lip of the fish. The rope is coupled to the clip such
1	that any force exerted on the rope increases the gripping power of the clip.
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Figure | Prior Art





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Page 1 of 3

Docket No. FANEUF 00.02

Declaration and Power of Attorney For Patent Application **English Language Declaration**

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (If only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

Combination Rope and Clip for Culling Fish

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(c:	neck one)		
×	is attached hereto.		
	was filed on	as United States App	illcation No. or PCT International
	Application Number		
	and was amended on		midding manne mass of the state
		(if applicable)	
1 h	ereby state that I have rev	owed and understand the contents of	the shave identified enecification

including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.

I hereby claim foreign priority benefits under Title 35. United States Code, Section 119(z)-(d) or Section 365(b) of any foreign application(s) for patent or inventor's certificate, or Section 365(e) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or Inventor's certificate or PCT International application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application	(\$)		Priority Not Glaimed
(Number)	(Country)	(Day/Month/Year Filed)	23
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Page 2 of 3

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hereby claim the benefit under 35 U.S.C. Section 119(e) of any United States provisional application(s) listed below: (Filing Date) (Application Serial No.) (Application Serial No.) (Filing Date) (Filing Date) (Application Serial No.) I hereby claim the benefit under 35 U. S. C. Section 120 of any United States application(s), or Section 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the cigims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. Section 112. I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, C. F. R., Section 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application: (Application Senai No.) (Status) (Filing Date) (patented, pending, abandoned) (Application Serial No.) (Status) (Filing Date) (patented, pending, abendones)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge triat willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willfur false statements may jeopardize the validity of the application or any patent issued thereon

(Filing Date)

(Application Serial No.)

(Status) (patented, pending, abandones) NOV-20-00 MON 02:04 PM HAYES SOLOWAY FAX NO. 6036680104

Page 3 of 3

ent(s) to prosecute this	: As a named inventor, I hereby appoint the following attorney(s) and application and transact all business in the Patent and Trademark Off
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